

PTO/SB/33 (07-06)

Approved for use through xx/xx/200x. OMB 0651-00xx
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays an OMB control number.

PRE-APPEAL BRIEF REQUEST FOR REVIEWDocket Number (Optional)
1316N-001663

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

Application Number
10/775,881Filed
02/10/2004First Named Inventor
Luc Lemmens, et al.On August 14, 2007

Signature

Art Unit
3683Examiner
Christopher P. SchwartzTyped or printed name Michael J. Schmidt

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor

☐ assignee of record of the entire interest.
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

☒ attorney or agent of record.
Registration number 34,007.

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

SignatureMichael J. Schmidt

Typed or printed name

(248) 641-1600

Telephone number

August 14, 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐ *Total of _____ forms are submitted.



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: 10/775,881
Filing Date: 02/10/2004
Applicant: Luc Lemmens, et al.
Group Art Unit: 3683
Examiner: Christopher P. Schwartz
Title: AIR PRESSURE PROPORTIONAL DAMPER FOR SHOCK ABSORBER
Confirmation No.: 1429
Attorney Docket: 1316N-001663

Mail Stop AF
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

PRE-APPEAL BRIEF REVIEW ARGUMENTS

Sir:

Claims 1-17 are pending in this application. Claims 7-17 have been allowed.

Thus, this appeal is directed to only pending Claims 1-6.

DRAWINGS

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. The Examiner is of the opinion that the second fluid passage, as now claimed, must be shown or the features cancelled

from the claims. No new matter should be entered. Applicants traverse this interpretation by the Examiner.

Figure 4 clearly illustrates two flow passages using two sets of arrows. The Examiner agrees with this disclosure of Figure 4. On page 3 of the Examiner's March 25, 2007 Office Action (Paper No. 20070523) the Examiner states "On the contrary, Figure 4 shows via two arrows the path of fluid flow..." In addition, the specification on page 12, paragraph [0031] clearly defines two fluid passages. The first through passage 130 and the second between lower membrane 52b and the housing when lower membrane 52b flexes.

Thus, Applicants believe that the drawings, as originally filed, illustrate the two flow paths. Withdrawal of the objection is respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 112

The Examiner's position is that Claims 1-6 remain rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. The Examiner is of the opinion that the claims contain subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicants respectfully traverse this interpretation of the Examiner.

Specifically, the Examiner objects to the limitation "a membrane movable between a first position where the second fluid passage is open and a second position where the second fluid passage is closed to prevent fluid flow through the second fluid passage" (emphasis added). The Examiner states that Figure 4 shows via two arrows,

the path of fluid flow when the lower membrane 52b is in the closed position, or is in the seated position on the land.

Referring to Figure 4 and paragraph [0031] on page 12 which describes Figure 4, there is no support in the specification for the Examiner's position that Figure 4 illustrates lower membrane 52b being seated on the land. Figure 4 can be interpreted to illustrate the two flow passages when they are both open. The first through passage 130 and the second through the passage between lower membrane 52b and the land after the land has flexed even though Figure 4 illustrates the lower membrane 52b close to the land. The specification must be utilized to interpret Figure 4.

Paragraph [0031] describes the fluid flow in the two passages. Passage 130 extends through two of bottom plates 128. Passage 130 allows a small amount of fluid to pass from bottom chamber 126 into a chamber 132 to be communicated out to outlet 116. As a result, during small and low flow rates, passage 130 is sufficient to allow venting of fluid from bottom chamber 126 to chamber 132. It should be noted that there is no discussion of fluid flow through the second fluid passage at this time since passage 130 is sufficient to allow the fluid flow.

The specification goes on, however, as the fluid flow increases, passage 130 is insufficient to handle the volumetric flow rate of fluid from bottom chamber 126 to outlet 116. Therefore, lower membrane 52b flexes to open a second fluid passage or flow path to allow sufficient fluid flow.

Thus, the specification clearly defines Figure 4 and that as long as there are low flow rates passage 130 is sufficient to allow venting of fluid. This inherently teaches that if fluid flow is sufficient through passage 130, there is no flow through the second

passage (between lower membrane 52b and the land) and that lower membrane 52b must inherently prevent this fluid flow. If this fluid flow is not prevented the specification would teach two flow paths at low flow rates. Once, passage 130 is insufficient to handle the fluid flow (it becomes saturated) lower membrane 52b flexes to open a flow path (second flow passage) to allow sufficient fluid flow.

Applicants believe there is support for lower membrane 52b preventing fluid flow through the second passage since the specification defines that only after passage 130 is insufficient to handle the fluid flow does lower membrane 52b flex to open the second fluid passage for fluid flow.

REJECTION UNDER 35 U.S.C. § 103

Claims 1-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Vermolen, et al. in view of de Molina. Applicants respectfully traverse this rejection. Claim 1 defines "the first fluid passage as an aperture extending through the membrane to allow a specified amount of fluid flow between the first chamber and the second chamber through the first passage. Thus, the fluid flow is defined as through the aperture since the first fluid passage is defined as the aperture. As previously discussed, Vermolen, et al. does not disclose fluid flow through aperture 106 between the two fluid chambers. Assuming that the shim disc could contact land 96 (the second position of the membrane) there could not possibly be flow through restriction 108 since it would be closed. As described in Vermolen, et al., hole 106 is a tuning parameter for the shock absorber because it affects the stiffness for the assembly (column 5, line 15) and not because of fluid flow through hole 106. The size of restriction 108 is controlled

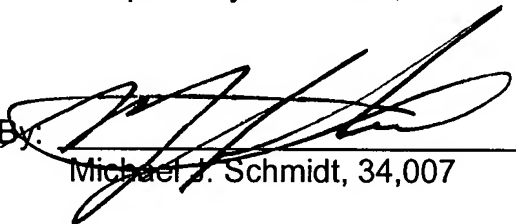
by hole 106 because it controls the stiffness of the assembly which is affected by the thickness of disc 78 and the pressure in chambers 110 and 112. Reconsideration of the rejection is respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: August 14, 2007

By: 
Michael J. Schmidt, 34,007

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MJS/pmg